

## Current Distributed Software Applications

The following applications are now available for processing on board or college VAX computers.

### Financial Accounting System (FAS)

FAS is an interactive accounting system designed for school boards. Online enquiry and updates to a data base streamline processing and reduce the possibility of errors, shorten response time, and accelerate the closing of books at year-end. Batch mode is also available for large volumes of transactions. Both user-defined and system-defined reports are available. The account structure accommodates up to 35 characters and 15 levels. The modular design of the system contains six integrated sub-systems: Maintenance, Purchase Order Entry, Accounts Payable, General Ledger, Budget, and Inventory.

### Integrated School Service (ISS)

ISS, a batch system, is essentially a mark-gathering and reporting service. As well as producing end-of-term and end-of-semester report cards and a wide range of lists and special items, it maintains the historical data on individual students needed to produce reports for the Ontario Student Record file. There is an interface between ISS and SSS (Student Scheduling Service) so that a comprehensive school administrative service is provided.

### Payroll Personnel Administration Service (PPAS)

PPAS, a batch system, was created to address the specific needs of school-board payroll offices. The facilities provided allow for the processing of standard payroll deductions and for compliance with the special reporting requirements and deduction of dues for the Teachers' Superannuation Commission and the Ontario Teachers' Federation. T4s and T4As are automatic with the system. PPAS does support online enquiry and data entry.

### Personnel Employee Management Information Service (PREMIS)

PREMIS, a batch system, is designed to provide school boards with quick and easy access to information about the status and seniority of their staff members. It interacts with PPAS and has the capability to record and store "sick-leave" data for reports and statistics and to generate information about salary costs through a grid system. PREMIS does support online enquiry and data entry.

### Student Instructional Services (SIS)

SIS is available to support the classroom instructional use of computers. These support services are geared to data processing, computer science, informatics, mathematics, and commercial courses. They include several student-oriented computer languages from the University of Waterloo, such as WATFOR, WATBOL, PASCAL, APL, and BASIC.

### Student Guidance Information Service (SGIS)

SGIS provides students and guidance counsellors with ready access to a large data bank of career-related information such as career descriptions and requirements and descriptions of courses and programs at the post-secondary level, including those of trade and business schools. Students receive individualized print-outs of the material they have requested in either French or English.

### Student Administration System (SAS)

(Available September 1983)

SAS will provide a comprehensive set of functions for a broad range of student administration applications in the elementary and secondary panels. Through the use of terminals in the schools, administrators will obtain timely, cost-effective assistance in such areas as: registration; scheduling and timetabling; mark-gathering, reporting, and analysis; attendance; promotion; guidance; and the collection and maintenance of both general and historical student data.

## Centralized Software Applications

These batch applications are processed on the Queen's Park computer.

### Route Management and Update Service (ROMUS)

ROMUS is a computerized transportation-management system designed to aid school boards in achieving and maintaining full control of their school-bus transportation needs. It does not design new bus routes; its main function is to help users make the best use of existing routes in a consistent, economical, and organized manner. (ROMUS is scheduled for conversion to VAX in 1983.)

### Vocational Interest Service (VIS)

VIS allows students to assess their capabilities, assets, and aspirations, and points them towards those careers or occupations that appear to be best suited to their individual needs and profiles. It serves as a logical first step in determining possible career paths, and can subsequently be supplemented by the use of SGIS. The computer-scored tests, which are available in both English and French, include the Jackson Vocational Interest Survey and the Strong-Campbell Interest Inventory.

### Student Scheduling Service (SSS)

SSS, a batch system, is a sophisticated and economical system designed to aid in the preparation of student timetables. In addition to producing many reports that assist the user in designing a master timetable, SSS produces individualized timetables for students, teachers, and classrooms, along with class lists. (Note: The new Student Administration System (SAS) will replace this service.)

For further information please contact:

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or .....

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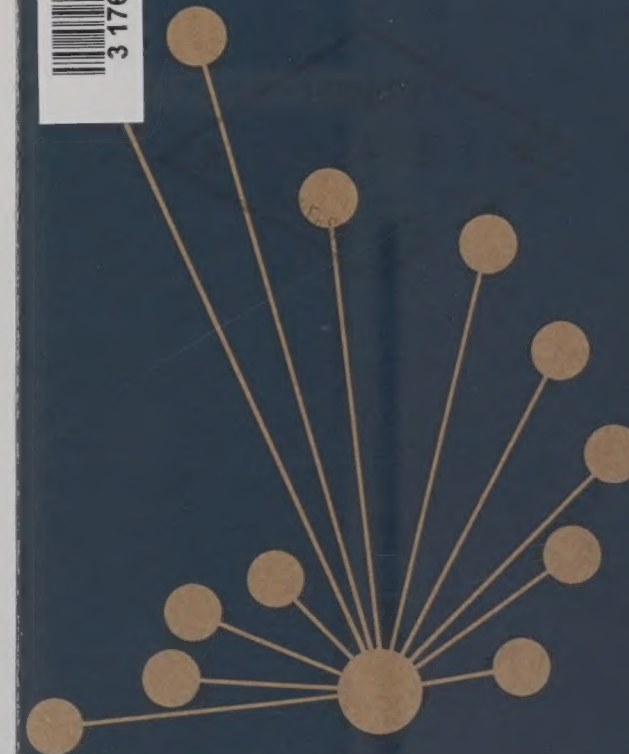
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h. Bette Stephenson, M.D., Minister  
ry K. Fisher, Deputy Minister

## The Educational Computing Network of Ontario (ECNO)





The Educational Computing Network of Ontario (ECNO) is managed by the Ontario Ministry of Education on behalf of the province. The objective of the network is to deliver effective data-processing services to the educational communities in the province through the use of common equipment and software.

The following are the locations of the ECNO computer sites as of December 1982:

Location	Operated by
Ancaster	Wentworth County Board of Education
Aurora	York County Board of Education
Brockville	*Leeds and Grenville Board of Education
Chatham	Kent County Board of Education
Cobourg	*Northumberland and Newcastle Board of Education
Essex	Essex County Board of Education
Kingston	Frontenac County Board of Education
Kitchener	*Waterloo County Board of Education
London	*Board of Education for the City of London
Markdale	*Grey County Board of Education
Mississauga	Dufferin-Peel Roman Catholic Separate School Board
New Liskeard	*Ministry of Education
North Bay	*Nipissing Board of Education
Ottawa	*Carleton Board of Education Ottawa Roman Catholic Separate School Board
Pembroke	*Renfrew County Board of Education
Sarnia	*Lambton County Board of Education
Sault Ste. Marie	*Sault Ste. Marie Board of Education
St. Catharines	Lincoln County Board of Education
Sudbury	*Sudbury Board of Education
Thunder Bay	*Lakehead Board of Education
Windsor	*Windsor Board of Education

Some ECNO sites, designated with an asterisk, act as service centres for designated geographical areas by marketing and delivering common data-processing services in accordance with a standard price schedule. These centres provide local users with access to the computer equipment and associated systems and services that are centrally supported by the Ministry of Education. The school board staff of ECNO sites throughout the province work co-operatively with each other and with the ministry to plan and develop practical, economical services that respond to the data-processing needs of local users.

In addition, the following school boards provide the ministry's sgis program:

Durham Board of Education  
Etobicoke Board of Education  
North York Board of Education  
Peel Board of Education  
Ottawa Board of Education  
Scarborough Board of Education  
York Borough Board of Education

## ECNO Hardware

The hardware supported by ECNO is the Digital Equipment of Canada (DEC) VAX/VMS family of computers. Currently, the hardware models are:

VAX-11/730  
VAX-11/750  
VAX-11/780  
VAX-11/782

All DEC-VAX models support a wide range of peripheral devices — printers, terminals, etc. — as well as a range of user-required software such as COBOL, FORTRAN, DATATRIEVE, and BASIC. All ECNO application software is designed to operate on all models of VAX computers. The VAX-11/730, the smallest member of the VAX family, is ideally suited to the smaller board or a board just getting started. Such a board may find it practical to run most of its routine applications on this model and rely on a larger adjacent-board host site for computer applications that require more complex computing resources.

The VAX-11/750 is ideal for the medium-sized board. The 11/750 currently drives most ECNO sites.

Larger boards, particularly those with high-volume DP environments, may require the larger VAX-11/780 or VAX-11/782 and the associated higher-speed peripheral devices.

## The Advantages of ECNO

Significant advantages accrue both to the ministry and to the province's schools and school boards from membership in the network. The ministry's objective is to provide all boards with equal access to the computing resources necessary to support school and board administrative functions. The broad geographical distribution of participants, together with their willingness to accept the responsibility of providing services to their neighbours, enables small boards and small schools to have access to data-processing services that would be difficult for them to obtain on an individual, independent basis.

The ministry has effected substantial savings for members of the network by centrally defining, developing, and maintaining required computer services. These include:

- ministry systems — programmed packages designed specifically for schools and school boards;
- additional software products such as DATATRIEVE, IFPS, and SPSS, which give the user access to files and the ability to generate reports;
- full software support of all systems and products;
- training programs for new users and use of a wide range of audio-visual, technical training products such as DELTAK;
- co-operative data sharing — an automated process whereby boards and the ministry exchange the information necessary for planning and decision-making;
- regular seminars that provide members of the network with a forum through which they can be brought up to date on technical developments and can meet and learn from others working in similar environments;
- the ministry service function — people familiar with the education environment and trained to assist school boards in meeting their data-processing needs.

The network provides cost advantages for the following reasons:

- hardware costs are significantly reduced due to the volume discount arrangement contained within the ECNO master agreement with Digital Equipment of Canada;
- volume buying results in the reduction of the costs of computer forms and data communications;
- centralized development eliminates costly software duplication by individual boards;
- centrally supported systems facilitate economical and reliable program maintenance;
- software sharing between boards reduces the cost of software to individual boards;
- revenues generated by the delivery of data-processing services to surrounding boards can significantly reduce the costs of supplier boards.